

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Revision of the Commission's)	
Rules to Ensure Compatibility)	CC Docket No. 94-102
with Enhanced 911 Emergency)	
Calling Systems)	
)	
Verizon Wireless)	DA-01-1836
Request for Waiver)	

To: The Commission

**COMMENTS OF APCO, NENA, AND NASNA
IN RESPONSE TO REQUEST FOR WAIVER OF
VERIZON WIRELESS**

The Association of Public-Safety Communications Officials-International, Inc. (“APCO”), the National Emergency Number Association (“NENA”), and the National Association of State Nine One One Administrators (“NASNA”) (collectively referred to herein as “Public Safety Organizations”) hereby submit the following comments in response to the Commission’s *Public Notice*, DA 01-1836, released July 31, 2001, seeking public comments regarding a “Request for Limited Waiver” filed by Verizon Wireless (“Verizon”) on July 25, 2001, in the above-captioned proceeding.

I. The Verizon Proposal

Verizon, the nation’s largest wireless carrier, had originally reported an intention to implement a network-based location technology to satisfy the Commission’s Phase II requirements for locating wireless 9-1-1 calls. Until recently, Verizon had indicated that it was

proceeding on schedule and would be in a position to begin deploying network-based Phase II capability within six months of receiving valid PSAP requests. Now Verizon is switching to a handset-based technology, Assisted GPS/Advanced Forward Link Trilateration (“hereinafter “A-GPS”), though it is proceeding with plans to implement network-based solutions on an “interim” basis in the Chicago, Houston, and St. Louis areas.¹

Verizon requests a limited waiver of the Commission’s deadlines (a) for selling location capable handsets, citing delays in the delivery of handsets by manufacturers, and (b) for Phase II activation, citing delays in the delivery network switch equipment from Lucent, Nortel, and Motorola. Verizon will not begin distributing location-capable handsets until December 2001, while the FCC’s rule requires initial deployment of handsets by October 1. Verizon also requests delays of seven months (until July 31, 2002) for the 25% benchmark, nine months (until March 31, 2003) for the 50% benchmark, and twelve months (until December 31, 2003) for the 100% benchmark. However, activation of the A-GPS capability and actual delivery of Phase II information must await upgrades to Verizon’s network switches, the timing of which will vary depending upon brand of switches used in each market. According to Verizon, full activation of A-GPS will not be possible until April 1, 2002, for markets served by Lucent switches, August 30, 2002, for Nortel markets, and not until March 1, 2003, for Motorola markets.² Verizon also proposes to implement location capability in these markets as switches are upgraded, without regard to the receipt of Phase II requests from PSAPs.

¹ Verizon claims that it will provide network capability to 100% of these areas by April 1, 2002. However, our understanding is that, at least in Harris County, Texas (Houston), Verizon will not even begin Phase II deployment until that date, despite prior indications that Harris County deployment could begin on October 1, 2001.

² Verizon does not indicate the number of subscribers or the geographic locations impacted by these varying delays. The Commission should require that Verizon submit such data to create a more complete picture of the consequences of the requested waiver.

Finally, as an interim solution until all subscribers have A-GPS capability, Verizon proposes to implement network-based technologies in Chicago, Houston, and St. Louis and “to continue testing” a switch-based Enhanced Forward Link Trilateration (EFLT) location technology for other markets served by Lucent and Nortel switches. Verizon does not otherwise propose an interim solution for the substantial portion of its nationwide network served by Motorola switches, which will also be the very last to have fully deployed A-GPS capability.

II. Public Safety Response

The Public Safety Organizations are disappointed that Verizon is abandoning network-based solutions in all but three major markets. While the Public Safety Organizations are resolutely “technology neutral,” we would prefer that carriers have multiple options available for meeting the Phase II requirements, including both network and handset-based technologies. That now appears to be unlikely as every major nationwide wireless carrier has selected a handset-based approach. Carriers will thus be left with limited options should their preferred handset-based technologies fail to meet their stated goals and expectations. It is also important to recognize that each location technology has certain advantages and disadvantages in different environments. For example, Verizon indicates that the network-based technologies that it had originally selected would have met the accuracy requirements for urban and suburban environments, but that only handset-based technologies could meet the accuracy requirements in rural areas. What is not clear from the Verizon request, however, is why it could not implement a more substantial mix of technologies across the nation. The Commission should seek additional information on this point.

Verizon bases its waiver request primarily on the delays in equipment delivery by handset manufacturers and network infrastructure equipment providers such as Lucent, Nortel, and Motorola. While Verizon has presented some supporting documentation, the Commission must exercise a very high level of scrutiny in this regard. The delays cited by Verizon are also impacting other carriers, and postponing Phase II deployment to varying degrees for the entire nation. Therefore, the Public Safety Organizations urge the Commission to exercise its full investigative authority and verify that the equipment delivery dates are in fact beyond the carriers' control and cannot be further accelerated. If necessary, the Commission should insist that the relevant equipment vendors further document their manufacturing schedules and causes for delay. The Commission should also explore whether the delays are the result of late orders being placed by Verizon and other carriers, or other factors. If the former, the carriers should be held accountable and not allowed to benefit from their own slow pace in ordering necessary Phase II components.

Sprint, another nationwide CDMA carrier using A-GPS location technology, indicates that it will meet the FCC's requirement that 100% of its newly deployed handsets have location capability by December 31, 2002.³ Yet, Verizon does not propose to meet that threshold until a full year later, on December 31, 2003. While Verizon implies that it faces special problems due to its need for "tri-mode" handsets, it has not fully explained why it cannot meet the same schedule as Sprint and other CDMA carriers that appear to be similarly situated. The Commission should insist upon, and carefully scrutinize, a more thorough explanation from Verizon on this point.

³ Qwest, which also intends to adopt A-GPS for its CDMA network, proposes to meet the 100% benchmark by March 31, 2003.

Under Verizon's proposal, it will continue to sell non-location capable handsets until December 31, 2003, a full year after the deadline established in the Commission's rules. That additional year will add substantially to the number of legacy handsets on the Verizon system for years to come. Especially in that context, it is important that Verizon provide a reliable and accurate interim solution for all subscribers during the transition period.⁴ However, the Public Safety Organizations find Verizon's interim solution to be lacking in several important respects.

Verizon only offers a tentative proposal to implement Enhanced Forward Link Trilateration ("EFLT") as an interim solution, pending completion of further tests.⁵ The Commission should have a firm commitment from Verizon regarding EFLT, and more substantial test results, before addressing its waiver request (and, if a waiver is granted, the interim solution must be made a condition of the waiver). Verizon indicates that it will be able to deploy EFLT in Lucent markets by April 1, 2002, "followed closely" by Nortel. The Commission should insist upon a more definite schedule for the Nortel markets. Verizon also states that EFLT is not a viable option for Motorola switches at this time, which is particularly troublesome since Verizon does not propose to activate A-GPS in Motorola switch markets until March 1, 2003. That will leave a substantial portion of the Verizon network without any Phase II capability until that time, and even then legacy handsets will be without Phase II in the absence of an interim solution.⁶ Here again, Verizon should be required to document the actual number

⁴ Our recommendations here and in other comments that carriers implementing handset solutions also adopt *interim* solutions for their existing wireless networks must not be confused with our steadfast objection to AT&T's *indefinite* reliance on inaccurate switch-based MNLS technology for its existing TDMA network. Contrary to AT&T's suggestion, use of MNLS in that instance is not an interim solution. Rather, for its TDMA customers, it is a permanent solution. Furthermore, for any interim solution to be effective, it must provide accuracy levels that are reasonably close to the targets in the Commission's rules.

⁵ Verizon states that preliminary testing of EFLT indicates accuracy of 250-350 meters.

⁶ Verizon states that Motorola has indicated that "it could potentially deliver" infrastructure necessary for EFLT by March 2003. However, we do not read this as a commitment by Verizon to provide EFLT for Motorola switches. Further clarification on this point should be required.

of subscribers served by Motorola switches and deprived of even the potential for Phase II capability until at least March 1, 2003.

Verizon proposes to activate Phase II capability on a market-by-market basis depending upon switch upgrade schedules, without regard to there being Phase II requests from PSAPs. On one hand, Verizon's overall waiver request means that PSAPs that have already made or will soon make Phase II requests will need to wait well beyond six months before actually receiving Phase II data. On the other hand, Verizon's proposal to activate Phase II based on switch upgrades, rather than waiting for PSAP requests, could reduce significantly the potential for disputes with PSAPs regarding the validity of their requests or their degree of Phase II readiness. Verizon appears to be saying that once it upgrades its switches in a particular area, PSAPs will be able to obtain Phase II data immediately upon making their request. Verizon should clarify this point, and verify that all steps necessary for Verizon to activate Phase II will be completed by the time the switch upgrades occur.

The Public Safety Organizations, while troubled by the delay in Phase II activation proposed in Verizon's overall waiver request, believe that Verizon's approach to deployment even in the absence of PSAP requests may have considerable merit. Other carriers should consider similar approaches in their Phase II deployment, whether or not they receive waivers from the Commission.

Finally, the Public Safety Organizations reiterate that the Commission must draw a line, and strictly enforce its rules in the absence of a compelling case for limited waiver. Where waivers are granted, the Commission must impose strict conditions, including alternative deployment deadlines and detailed reporting requirements. Carriers that fail to meet the FCC's rules, or the alternative deadlines adopted as part of a waiver, must be subject to sanction,

including financial penalties. Furthermore, where a carrier's location technology fails to deliver (either in terms of promised accuracy or equipment availability), it should be required to adopt alternative technology. In that regard, carriers should be encouraged to implement multiple technologies and approaches, to maximize available options should their preferred solution fail.

CONCLUSION

The Public Safety Organizations urge the Commission to scrutinize carefully the Verizon waiver request and require additional information consistent with the issues raised above. The record as it stands does not provide a sufficient basis for a waiver of the Commission's rules.

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